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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,636	07/28/2003	Vladislav Orlovsky	200418	3592

7590 10/04/2005
Charles F. Lind
2210 E. Sherwood
Arlington Hts, IL 60004

EXAMINER

THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,636

Applicant(s)

ORLOVSKY ET AL.

Examiner

Ernest G. Therkorn

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Talley (U.S. Patent No. 4,118,316). The claim is considered to read on Talley (U.S. Patent No. 4,118,316). However, if a difference exists between the claim and Talley (U.S. Patent No. 4,118,316), it would reside in optimizing the elements of Talley (U.S. Patent No. 4,118,316). It would have been obvious to optimize the elements of Talley (U.S. Patent No. 4,118,316) to enhance separation.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Talley (U.S. Patent No. 4,118,316) in view of Snyder, Introduction to Modern Liquid Chromatography (1979), pages 5-8. At best, the claim differs from Talley (U.S. Patent No. 4,118,316) in the clarity of reciting high performance liquid chromatography. Talley (U.S. Patent No. 4,118,316) himself (column 1, lines 52-56) discloses that his supports are rigid and non-compressible thereby permitting utilization of high speed techniques. Snyder, Introduction to Modern Liquid Chromatography (1979), pages 5-8 discloses on

page 6 that what we refer to as modern liquid chromatography is high performance liquid chromatography or high speed liquid chromatography. It would have been obvious that Talley (U.S. Patent No. 4,118,316)'s support are suitable for high performance liquid chromatography because Talley (U.S. Patent No. 4,118,316) himself (column 1, lines 52-56) discloses that his supports are rigid and non-compressible thereby permitting utilization of high speed techniques and Snyder, Introduction to Modern Liquid Chromatography (1979), pages 5-8 discloses on page 6 that what we refer to as modern liquid chromatography is high performance liquid chromatography or high speed liquid chromatography.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers (U.S. Patent No. 4,330,440) in view of O'Gara (LCGC Volume 19, Number 6 June 2001, pages 632-642). At best, the claim differs from Ayers (U.S. Patent No. 4,330,440) Formula II's stationary phase in reciting use of a hydrophobic phase as the ligand. O'Gara (LCGC Volume 19, Number 6 June 2001, pages 632-642) (Abstract, line 3; page 1, column 1, lines 1-24, particularly lines 20-24; page 1, column 2, lines 1-2; and Figures 1 and 2) discloses that octadecyl and octyl groups are the traditional reverse phase ligands that have been in use for the past 30 years. It would have been obvious to use octadecyl and octyl groups in Ayers (U.S. Patent No. 4,330,440) because O'Gara (LCGC Volume 19, Number 6 June 2001, pages 632-642) (Abstract, line 3; page 1, column 1, lines 1-24, particularly lines 20-24; page 1, column 2, lines 1-2; and Figures 1 and 2) discloses that octadecyl and octyl groups are the traditional reverse phase ligands that have been in use for the past 30 years.

The remarks urge patentability based upon the allegation that Talley (U.S. Patent No. 4,118,316) is not directed to HPLC. The limitation with regard to HPLC is merely intended use. However, Talley (U.S. Patent No. 4,118,316) (column 1, lines 52-56) discloses that his supports are rigid and non-compressible thereby permitting utilization of high speed techniques. As such, they are considered to be suitable for HPLC. In addition, Snyder, Introduction to Modern Liquid Chromatography (1979), pages 5-8 discloses on page 6 that what we refer to as modern liquid chromatography is high performance liquid chromatography or high speed liquid chromatography. Accordingly, it would have been obvious that Talley (U.S. Patent No. 4,118,316)'s support are suitable for high performance liquid chromatography because Talley (U.S. Patent No. 4,118,316) himself (column 1, lines 52-56) discloses that his supports are rigid and non-compressible thereby permitting utilization of high speed techniques and Snyder, Introduction to Modern Liquid Chromatography (1979), pages 5-8 discloses on page 6 that what we refer to as modern liquid chromatography is high performance liquid chromatography or high speed liquid chromatography.

The remarks urge that Talley (U.S. Patent No. 4,118,316)'s hydrophobic functional group is only four carbons long. However, the claims read on Talley (U.S. Patent No. 4,118,316) because they do not limit the length of the hydrophobic functional group.

The remarks urge that Ayers (U.S. Patent No. 4,330,440)'s ionic and hydrophobic groups are in reverse order relative to the claimed invention. However, Ayers (U.S. Patent No. 4,330,440)'s column 2 Formula II shows the ionic NH_2^+ is closer

to the support than the R (a suitable ligand). O'Gara (LCGC Volume 19, Number 6 June 2001, pages 632-642) (Abstract, line 3; page 1, column 1, lines 1-24, particularly lines 20-24; page 1, column 2, lines 1-2; and Figures 1 and 2) discloses that octadecyl and octyl groups are the traditional reverse phase ligands that have been in use for the past 30 years. It would have been obvious to use octadecyl and octyl groups in Ayers (U.S. Patent No. 4,330,440) as his suitable ligand because O'Gara (LCGC Volume 19, Number 6 June 2001, pages 632-642) (Abstract, line 3; page 1, column 1, lines 1-24, particularly lines 20-24; page 1, column 2, lines 1-2; and Figures 1 and 2) discloses that octadecyl and octyl groups are the traditional reverse phase ligands that have been in use for the past 30 years.

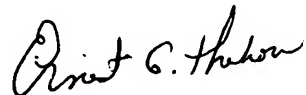
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT
September 28, 2005